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Printed: Margaret M. Hasson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Bandman et al.Title: HUMAN S-ADENOSYL-L-METHIONINE METHYLTRANSFERASESerial No.: 10/024,933Filing Date: December 18, 2001Examiner: Hutson, R.Group Art Unit: 1652**Box Non-Fee Amendment**Commissioner for Patents
Washington, D.C. 20231RECEIVED
MAR 04 2003
TECH CENTER 1600/2900TRANSMITTAL FEE SHEET

Sir:

Transmitted herewith are the following for the above-identified application:

1. Return Receipt Postcard; and
2. Response to Restriction Requirement (7 pp.).

The fee has been calculated as shown below.

Claims	Claims After Amendment	-	Claims Previously Paid For	=	Present Extra	Other Than Small Entity Rate	Fee		Additional Fee(s)
Total	20	-	20		0	x\$18.00		\$	0
Indept.	2	-	3		0	x\$84.00		\$	0
First Presentation of Multiple Dependent Claims						+280.00		\$	0
Total Fee:								\$	0

☒ No additional Fee is required.

The Commissioner is hereby authorized to charge any additional fees required under 37 CFR 1.16 and 1.17, or credit overpayment to Deposit Account No. 09-0108. **A duplicate copy of this sheet is enclosed.**

Respectfully submitted,

INCYTE GENOMICS, INC.

Date: February 21, 2003Susan K. Sather

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Docket No.: PF-0352-2 DIV

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TECH CENTER 1600/29

In re Application of: Bandman et al.

Title: HUMAN S-ADENOSYL-L-METHIONINE METHYLTRANSFERASE

Serial No.: 10/024,933

Filing Date: December 18, 2001

Examiner: Hutson, R.

Group Art Unit: 1652

Box Non-Fee Amendment

Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO RESTRICTION REQUIREMENT UNDER 35 U.S.C. 121

Sir:

This paper is responsive to the Restriction Requirement and Request for Election dated January 29, 2003, setting a one (1) month term for response.

For the Examiner's convenience, all pending claims are listed below.

AVAILABLE COPY

1. An isolated polypeptide selected from the group consisting of:
 - a) a polypeptide comprising an amino acid sequence of SEQ ID NO:1,
 - b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID NO:1,
 - c) a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:1, and
 - d) an immunogenic fragment of a polypeptide having an amino acid sequence of SEQ ID NO:1.
2. An isolated polypeptide of claim 1, having a sequence of SEQ ID NO:1.
3. An isolated polynucleotide encoding a polypeptide of claim 1.
4. An isolated polynucleotide encoding a polypeptide of claim 2.
5. An isolated polynucleotide of claim 4, having a sequence of SEQ ID NO:2.
6. A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.
7. A cell transformed with a recombinant polynucleotide of claim 6.
8. A transgenic organism comprising a recombinant polynucleotide of claim 6.
9. A method for producing a polypeptide of claim 1, the method comprising:
 - a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and

- b) recovering the polypeptide so expressed.
10. A method of claim 9, wherein the polypeptide has the sequence of SEQ ID NO:1.
11. An isolated antibody which specifically binds to a polypeptide of claim 1.
12. An isolated polynucleotide selected from the group consisting of:
- a) a polynucleotide comprising a polynucleotide sequence of SEQ ID NO:2,
 - b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 90% identical to a polynucleotide sequence of SEQ ID NO:2,
 - c) a polynucleotide complementary to a polynucleotide of a),
 - d) a polynucleotide complementary to a polynucleotide of b), and
 - e) an RNA equivalent of a)-d).
13. An isolated polynucleotide comprising at least 60 contiguous nucleotides of a polynucleotide of claim 12.
14. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 12, the method comprising:
- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and
 - b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.
15. A method of claim 14, wherein the probe comprises at least 60 contiguous nucleotides.

16. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 12, the method comprising:

- a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

17. A composition comprising a polypeptide of claim 1 and a pharmaceutically acceptable excipient.

18. A composition of claim 17, wherein the polypeptide has an amino acid sequence of SEQ ID NO:1.

19. A method for treating a disease or condition associated with decreased expression of functional SAM-MT, comprising administering to a patient in need of such treatment the composition of claim 17.

20. A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
- b) detecting agonist activity in the sample.